

**Moisture absorption behavior of palm/polypropylene composites in distilled water and sea water.**

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**Abstract**

The objective of this study was to study the moisture absorption behavior of uncompatibilized and compatibilized palm fiber/polypropylene composites in distd. water and sea water. The amt. of moisture absorbed at satn. by polypropylene during immersion in both environments increased significantly by introduction of palm fiber in the polymer and this amt. was not affected by use of a coupling agent/compatibilizer (Epolene E-43). Incorporation of the compatibilizer Epolene E-43 in the composites increased moisture diffusion rate significantly. Moisture diffusivity values obtained in distd. water and sea water were similar in the case of palm/PP composite specimens without any compatibilizer. However, the moisture diffusion rate was faster in distd. water than that in sea water in the case of using compatibilizer Epolene E-43 in the palm/PP composite.